1. A geographic information transmitting system using a digital broadcasting network, comprising:

5   a geographic information collecting means for receiving real-time geographic information and real-time traffic information from a central/local geographic information collecting network;

a geographic information processing means for 10 extracting/processing local geographic information and local traffic information from the geographic information collecting means and outputting whole area information, and geographic information/traffic information for a plurality of resolution levels;

15   a digital broadcasting means for converting and transmitting the geographic information/traffic information from the geographic information processing means in conformity to digital broadcast signals;

a geographic information multiplexing means for 20 multiplexing the geographic information/traffic information transmitted from the digital broadcasting means with local geographic information data; and

a transmitting means for transmitting the multiplexed geographic information/traffic information data to a 25 corresponding region.

2. The transmitting system as recited in claim 1,

wherein the digital broadcasting means receives the geographic information from the geographic information processing means and reestablishes a multiplexing structure of an existing geographic information broadcasting channel to transmit the geographic information to the transmitting means based on a predetermined standard for map segmentation.

3. The transmitting system as recited in claim 2, wherein the digital broadcasting means multiplexes the map data of a plurality of sizes, which are transmitted from the geographic information processing means, with the digital broadcast signals based on a map selection standard and a data retransmission period, which is determined according to a frequency of data change, in consideration of broadcasting conditions and the size of the broadcasting data channel and transmits the multiplexed map data to the transmitting means.

4. The transmitting system as recited in claim 1, wherein the geographic information processing means processes update data as soon as the update data are received and adds the update data to information transmitted to each region by providing a plurality of map data versions which have a different file size based on significance of the geographic information and a level of resolution.

5. A geographic information receiving system using a digital broadcasting network, comprising:

a synchronizing means for selecting/synchronizing signals transmitted from each transmitter;

a demodulating means for demodulating the synchronized signals;

a demultiplexing means for demultiplexing the demodulated signals;

a data decoding means for decoding the demultiplexed signals;

a storing means for storing the decoded data;

a map data managing means for managing the data stored in the storing means and displaying a requested part of a map; and

a navigation/display means for displaying map data and perform navigation under the control of the map data managing means.

6. The receiving system as recited in claim 5, further comprising:

an audio/video controlling means for controlling and outputting audio/video data among the signals demultiplexed in the demultiplexing means.

7. The receiving system as recited in claim 5, wherein the map data managing means combines the map data

stored in the storing means at boundary points so that there is no data vacancy, and displays a requested part of the map on the navigation/display means.

5   8.   The receiving system as recited in claim 5, wherein the storing means has a sufficient capacity to store map data of at least three regions so as to receive and store map data for all regions that involve in boundary of map segments and stores map segment numbers and location
10   coordinates of a particular point in advance.

9.   The receiving system as recited in claim 5, wherein once the storing means receives map data, the storing means stores the map data until the map data exceed
15   a predetermined capacity level and, if a vehicle moves to a new region, the storing means stores map data for the new region in the remainder of the storing means; and if the map data exceed the predetermined capacity level, the storing means deletes the stored map data from the data
20   with the lowest usage frequency.

10. A   method   for   transmitting   geographic information by using a digital broadcasting network, comprising the steps of:
25   a) collecting real-time geographic information and real-time traffic information from a central/local geographic information collecting network;

b) extracting/processing local geographic information and local traffic information from the collected geographic information/traffic information and outputting whole area information and geographic information/traffic information for a plurality of resolution levels;

c) converting and transmitting the outputted geographic information/traffic information data outputted from the step b) in conformity to digital broadcast signals;

d) multiplexing the geographic information/traffic information data transmitted in the step c) with local geographic information data;

e) performing encryption during the multiplexing in the step d) so that whether to allow a user to use the information be determined based on whether the user is a subscriber and what subscriber class the user belongs to; and

f) transmitting the multiplexed geographic information/traffic information data to a corresponding region.

11. A method for receiving geographic information by using a digital broadcasting network, comprising the steps of:

a) selecting/synchronizing signals transmitted from each transmitter;

b) demodulating the synchronized signals;

c) demultiplexing the demodulated signals;

d) decoding the demultiplexed signals;

e) performing decryption during the decoding in the step d) by determining whether to allow a user to use the geographic information based on whether the user is a subscriber and what subscriber class the user belongs to;

f) storing the decrypted data;

g) managing the data stored in the step f) by using a map data managing unit and displaying a requested part of a map; and

h) displaying map data and perform navigation under the control of the map data managing unit.